

CLAIMS

1. A method of controlling communications service in a telecommunications system comprising first and second subsystems each including a radio access network
5 comprising base stations (10, 20) and at least a radio network controller (11, 21) connected to at least some of said base stations and to a core network switch (12, 22), the first subsystem being adapted to support first and second communications services and the second subsystem
10 being adapted to support the second communications service,
the method comprising the following steps in the case of a first mobile terminal (1) having a call in progress with a second terminal (2) under the first communications
15 service via at least a base station (10) of the radio access network of the first subsystem:
 - the radio network controller (11) of the first subsystem detecting a call transfer condition for transferring the call to a base station (20) of the radio access network of the second subsystem;
 - informing the core network switch (12) to which the radio network controller (11) of the first subsystem is connected of said detection of a call transfer condition; and
25 · if the second subsystem is not adapted to process the call under the first communications service, requesting a change of service in order for said call to continue under the second communications service.
- 30 2. A method according to claim 1, wherein the radio network controller (11) of the first subsystem is connected to a core network switch (12) and the radio network controller (21) of the second subsystem is connected to a second core network switch (22), wherein,
35 after the first switch has been informed of said detection of a call transfer condition, a request to transfer the call from the first switch to the second

switch is transmitted, and wherein the inability of the second subsystem to process the call under the first communications service is indicated to the first switch by a transfer failure message sent in response to said 5 transmission of the call transfer request.

3. A method according to claim 1 or claim 2, wherein the first subsystem is of the third generation and the second subsystem is of the second generation.

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4. A method according to any preceding claim, wherein the first communications service necessitates a higher transmission bit rate than the second communications service.

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5. A method according to any preceding claim, wherein each communications service is associated with coding over at least a segment of the call and the service change request includes a request to change the coding 20 over said call segment.

6. A method according to claim 5, wherein the coding associated with the first communications service is compatible with the H.324 standard.

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7. A method according to any preceding claim, wherein the first communications service is a videotelephone service.

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8. A method according to any preceding claim, wherein the second communications service is a voice telephone service.

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9. A method according to claim 8, wherein Adaptive Multirate (AMR) coding is associated with the second communications service.

10. A method according to any one of claims 2 to 9, wherein said transfer failure message is sent to the first core network switch (12) and is forwarded to the radio network controller (11) of the first subsystem and 5 the step of informing the first switch of detection by the radio network controller of the first subsystem of a call transfer condition for transferring the call to a base station (20) of the radio access network of the second subsystem is repeated for as long as a transfer 10 failure message is forwarded to the radio network controller (11) of the first subsystem.

11. A method according to any preceding claim, wherein, if the second communications service necessitates a bit 15 rate over a radio segment that is strictly lower than a maximum bit rate value authorized by the second subsystem, the surplus bit rate is used to transmit data via at least said base station (20) of the radio access network of the second subsystem.

20 12. A method according to any preceding claim, wherein the service change request is transmitted to the first mobile terminal (1) and to the second terminal (2).

25 13. A method according to claim 12, wherein the service change request is transmitted to the second terminal (2) via at least a switch (13), a radio network controller (14) and a base station (15) to which the second terminal is connected.

30 14. A method according to any preceding claim, wherein the service change request includes a request for modification of radio access bearer characteristics of the call respectively at the mobile first terminal (1) 35 end and at the second terminal (2) end.

15. A core network switch (12) of a telecommunications system comprising first and second subsystems each including a radio access network comprising base stations (10, 20) and at least a radio network controller (11, 21)

5 connected to at least some of said base stations, at least some of the radio network controllers (11) also being connected to said core network switch (12), the first subsystem being adapted to support first and second communications services and the second subsystem being adapted to support the second communications service, said core network switch (12) comprising, in relation to a first mobile terminal (1) having a call in progress with a second terminal (2) under the first communications service via a base station (10) of the radio access

10 network of the first subsystem:

- means for receiving an indication that the radio network controller (11) of the first subsystem has detected a call transfer condition for transferring the call to a base station (20) of the radio access network

15 of the second subsystem; and

- means for requesting a service change in order for said call to continue under the second communications service if the second subsystem is not adapted to process the call under the first communications service.

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16. A switch (12) according to claim 15, wherein the radio network controller (11) of the first subsystem is connected to said core network switch (12) and the radio network controller (21) of the second subsystem is connected to a second core network switch (22), the switch (12) further comprising means responding to reception of an indication that a call transfer condition has been detected by transmitting a call transfer request to the second switch (22) and means for deducing that the second subsystem is not able to process the call under the first communications service from the reception of a

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transfer failure message in response to transmission of said call transfer request.

17. A switch (12) according to claim 15 or claim 16,
5 wherein the first subsystem is of the third generation and the second subsystem is of the second generation.

18. A switch (12) according to any one of claims 15 to 17, wherein the first communications service necessitates
10 a higher transmission bit rate than the second communications service.

19. A switch (12) according to any one of claims 15 to 18, wherein each communications service is associated
15 with coding over at least a segment of the call and the means for requesting a service change comprise means for requesting a coding change over said segment of the call.

20. A switch (12) according to claim 19, wherein the
20 coding associated with the first communications service is compatible with the H.324 standard.

21. A switch (12) according to any one of claims 15 to 20, wherein the first communications service is a
25 videotophone service.

22. A switch (12) according to any one of claims 15 to 21, wherein the second communications service is a voice
30 telephone service.

23. A switch (12) according to claim 22, wherein Adaptive MultiRate (AMR) coding is associated with the second communications service .

35 24. A switch (12) according to any one of claims 16 to 23, further comprising means for forwarding said transfer

failure message to the radio network controller (11) of the first subsystem.

25. A switch (12) according to any one of claims 15 to 5 24, wherein the means for requesting a service change comprise means for transmitting a service change request to change from the first communications service to the second communications service to the mobile first terminal (1) and to the second terminal (2).

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26. A switch (12) according to claim 25, wherein the means for transmitting a service change request to the second terminal (2) are provided by at least a switch (13), a radio network controller (14) and a base station 15 (15) to which the second terminal (2) is connected.

27. A switch (12) according to any one of claims 15 to 20 26, wherein the means for requesting a service change include means for requesting a modification of characteristics of at least a radio access bearer of the call.